



# MISSOURI DEPARTMENT OF TRANSPORTATION INFORMAL QUOTE GUIDELINES AND DOCUMENTATION

## REQUEST FOR QUOTATION

It is the vendor's responsibility to read and comply with all conditions, specifications, and instructions outlined in this document. This document and any subsequent attachments shall supersede all confirmation forms, receipts, or any other paperwork needed to secure materials, equipment, or services.

<b>TODAY'S DATE:</b> JUNE 24, 2008	<b>QUOTE DUE BY (DATE AND TIME):</b> JULY 1, 2008 @ 1:00 PM CENTRAL TIME	<b>F.O.B. REQUIREMENTS: DESTINATION</b> (SEE DELIVERY LOCATIONS BELOW)
FOR AS-NEEDED ORDERS AND DELIVERIES DURING THE 3 <sup>RD</sup> AND 4 <sup>TH</sup> QUARTERS OF 2008. (7-1-08 THROUGH 12-31-08)	<b>QUOTATION # D208-058-R2</b>  THIS QUOTATION # SHOULD BE REFERENCED ON ALL MAILING LABELS, ENVELOPES, AND ANY OTHER CORRESPONDENCE.	<b>BUYER NAME:</b> WILLIAM D. "BILL" NOYES, CPPO, CPPB <b>INTERMEDIATE PROCUREMENT AGENT</b> <b>PHONE NUMBER:</b> (660)-385-8245 <b>FAX:</b> (660)-385-1707
District Mailing Address: (RFQ responses may be faxed) Missouri Department of Transportation – District 2 General Services (Procurement) Division 902 North Missouri Street P.O. Box 8 Macon, MO. 63552		<b>Delivery Location:</b>  Refer to the list of MoDOT District 2 facilities contained herein (potential delivery points)

**SUBMIT PRICING ONLY ON ITEMS YOU WISH TO SUPPLY (It is not required to submit a quote on all items)**

U/M	MANUFACTURER	BRAND NAME	DESCRIPTION	UNIT PRICE
Bulk (Gallons)			15W-40 Motor Oil	\$ price per gallon
Bulk (Gallons)			Dexron Automatic Transmission Fluid	\$ price per gallon
Bulk (Gallons)			Universal Hydraulic Transmission Oil	\$ price per gallon
Container (55 Gallon)			10W-30 Motor Oil	\$ price per gallon
Container (120 LB)			Multi-Purpose Grease	\$ price per pound
Container (120 lb)			80W-90 Gear Oil (16 gallon keg) (Note: 7.5 lbs = 1 gallon)	\$ price per pound
Container (412.50 lb)			80W-90 Gear Oil (55 gallon drum) (Note: 7.5 lbs = 1 gallon)	\$ price per pound
Container (1 Gallon)			TES-295 Approval # _____ Fluid for Allison Transmissions	\$ price per gallon
Container (55 Gallon)			TES-295 Approval # _____ Fluid for Allison Transmissions	\$ price per gallon

**VENDOR NAME:**

(Please enter your company name in this block)

**NOTE ON UNIT PRICING FOR 80W-90 GEAR OIL:** MoDOT uses pounds for a unit cost within our inventory system for this product. When MoDOT enters the supplier's invoice prices in our system, it is more efficient (ensuring we can pay the vendor quickly) and accurate (for our inventory accountability) if this product is invoiced in pounds. **Suppliers must price this product by the pound, and invoice by the pound to facilitate MoDOT payment and inventory systems.** For 80W-90 Gear Oil, we use a conversion factor of 7.5 pounds equals 1 gallon. Using that conversion factor, 16-gallon kegs would equal 120 lbs and 55-gallon drums would equal 412.50 lbs. So, for example purposes only, if a 16-gallon keg price is \$120.00 or if a 55-gallon drum price is \$415.50, these would each calculate to a quoted unit price of \$1.00 per pound for each container size.

### SCOPE OF WORK

1.0 - This RFQ is to establish pricing for as-needed orders of the products listed above during the period of July 1, 2008 through December 31, 2008. Award decisions will be made on an "Item By Item" basis using the "lowest and best" principal of award. Orders during the contract period will be placed with the low bidder for each individual type of product.

2.0 - Prices quoted in response to this RFQ shall be **FIRM** for the contract period. However, MoDOT District 2 recognizes current economic conditions and market fluctuations have an impact on supplier's ability to quote and lock-in pricing for various products. Therefore, **suppliers will be allowed to submit revised prices to the MoDOT District 2 Procurement office, no later than 1:00 PM on the last Monday of each month.** Revisions received will go into effect the first day of the following month.

3.0 - When revised prices are received, an updated tabulation sheet will be prepared. This will be posted the first day of the following month, which will determine the awarded suppliers, beginning that month. Revised prices replace previously quoted prices and shall be **FIRM** for the next full month and/or for the remainder of the contract period, if no other revisions are received. **This may result in having a different low-bid supplier from month to month**, but we believe this is the fairest way to obtain competitive pricing while allowing supplier prices to reflect market conditions.

4.0 - Invoiced amounts will be based upon the prices in effect on the date an order is placed with the supplier, not on the date of delivery. Individual invoices should be provided to each ordering location.

5.0 - The successful supplier will be responsible for providing products to any of the MoDOT District 2 facilities listed herein. Each facility will verbally order products as-needed and will pay with individual purchases orders. **Deliveries shall be completed within seven (7) working days of receiving the order request**, unless otherwise authorized by the facility supervisor. Specific delivery days may be coordinated with each facility when orders are placed. (Refer to the Liquidated Damages section herein)

6.0 - For bulk deliveries, the supplier will top off the storage tanks when making a requested delivery. The supplier must be capable of supplying bulk materials to an elevation of 15 feet. The supplier is responsible for the clean up of spills caused by overfilling tanks or shipping damage to containers.

7.0 - Each supplier must include requested information requested for each product they submit pricing on, including the manufacturer, brand name, unit price, and TES-295 approval number for fluids for Allison Transmissions. TES-295 approved fluids can be found at [www.allisontransmission.com](http://www.allisontransmission.com) (copy attached).

8.0 - The successful supplier will be responsible for providing Materials Safety Data Sheets to each location for each product supplied. If requested, the supplier shall provide samples of products to the department for testing (one quart of each product) at no charge.

## **SPECIAL TERMS AND CONDITIONS**

### **F.O.B.**

All materials are F.O.B. Destination. Freight/Delivery costs must be included in the unit prices quoted.

### **Certificate of Good Standing**

The Bidder must be in compliance with the laws regarding conducting business in the State of Missouri. Within ten (10) business days of notification, the Bidder will need to provide a copy of his/her Missouri Secretary of State's "Certificate of Good Standing" prior to the issuance of any contract or initial purchase order by the Missouri Department of Transportation (MoDOT). MoDOT reserves the right, at its sole discretion, to extend the date this documentation must be provided. The Bidder's inability to provide this documentation will result in his/her bid being rejected.

### **RsMO 34.040.6 Compliance**

The Bidder must be in compliance with the laws regarding conducting business in the State of Missouri. The Bidder should ensure they are in good standing with the Missouri Department of Revenue. Prior to award MoDOT staff will check with the Missouri Department of Revenue to ensure compliance with the provisions of RsMO 34.040.6. If necessary a "Certificate of No Tax Due" may be requested of the successful Bidder. If such a certificate is requested, the Bidder's inability to provide this documentation will result in his/her bid being rejected.

### **Required Specifications**

All applicable materials quoted must comply with the attached MoDOT Specification # MGS-92-12J (dated 8-27-03) and any other provisions outlined in the solicitation documents. Fluids for use in Allison Transmissions must be TES-295 approved (information attached).

### **Delivery – Additional Requirements**

The supplier shall furnish the Missouri Department of Transportation with a planned delivery schedule at least 24 hours before starting delivery. Notification should be during the normal workday preceding the day on which the supplier desires to deliver. It will be necessary for a representative of the Missouri Department of Transportation to be present when the material is delivered. No deliveries will be made on Saturdays, Sundays, holidays. In the event a particular facility is working "4-10's", no deliveries will be made on a facilities scheduled day off (these are typically either a Friday or a Monday), unless specifically authorized by the facility supervisor.

The following days shall be construed as official holidays under the terms of the contract:

January 1	New Year's Day
Third Monday in January	Martin Luther King, Jr.'s Birthday
February 12	Lincoln's Birthday
Third Monday in February	Washington's Birthday
May 8	Truman's Birthday
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day

When any of the above holidays falls on a Sunday, the holiday will be observed on the following Monday; when any of the above holidays falls on a Saturday, the holiday will be observed on the immediately preceding Friday. The list above is for reference purposes only and may change by legislative action.

### **Liquidated Damages**

In the event the awarded supplier fails to deliver the material within the time specified or otherwise authorized by the facility supervisor, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the sum of **twenty-five dollars (\$25.00) per day, per item, for each assessable working day on which the delivery has not been completed**, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the supplier or otherwise collected from the supplier as liquidated damages.

### Facility Address/Location Cross-Reference Listing

Facility	County	Address	Location
Atlanta	Macon	708 N. Atterbury, Atlanta, MO 63530	Old Rt. 63 – 0.8 miles north of Rt. M
Bosworth	Carroll	Becks St., Bosworth, MO 64623	Becks St. – 0.4 miles north of Rt. M
Brookfield	Linn	28877 Hwy. 11, Brookfield, MO 64628	Rt. 36 and Rt. 11 Jct.
Carrollton	Carroll	215 South Mason, Carrollton, MO 64633	Old Rt. 65 – 0.2 miles south of Bus. 65
Chillicothe	Livingston	1301 Mitchell Ave., Chillicothe, MO 64601	Rt. 36 – 1 mile east of Rt. 65
Fayette	Howard	871 State Hwy 240, Fayette, MO 65248	Rt. 240 – 1 mile south of Rt. W
Green City	Sullivan	17403 Rte 129, Green City, MO 63545	Rt. 129 and Rt. YY Jct.
Harris	Sullivan	15587 Hwy 139, Harris, MO 64645	Rt. 139 – 0.6 miles south of Rt. E
Jct. C & V	Linn	16131 Hwy V, Purdin, MO 64674	Rt. C and Rt. V Jct.
Keytesville	Chariton	220 E. Jackson, Keytesville, MO 65261	Rt. 24 and Rt. 5 Jct.
Kirksville	Adair	22777 Potter Trail, Kirksville, MO 63501	Old Rt. 6 – 2 miles west of Rt. 63
Lancaster	Schuyler	Hwy 63 N, Lancaster, MO 63548	Rt. 63 – 0.2 miles north of Rt. 202
Macon	Macon	26988 US Hwy 63, Macon, MO 63552	Rt. 63 – 0.5 miles south of Rt. DD
Marshall	Saline	Rt. 2 Box 253, Marshall, MO 65340	Rt. 20 – 0.1 miles west of Rt. 65
Marshall Jct.	Saline	RR 1 Box 56A, Marshall, MO 65340	Rt. 65 – 1.5 miles north of I-70
Milan	Sullivan	1800 North Pearl, Milan, MO 63556	Rt. 6 and Rt. 5 Jct.
Moberly	Randolph	1501 East Hwy 24, Moberly, MO 65270	Rt. 24 – 0.9 miles east of Rt. 63
New Cambria	Macon	29992 State Hwy P, New Cambria, MO 63558	Rt. P – 0.4 miles south of Rt. 36
Princeton	Mercer	RR 2 Box 316B, Princeton, MO. 64673	Rt. 65 – 1 mile north of Rt. 136
Sweet Springs	Saline	326 Hwy 127, Sweet Springs, MO 65351	Rt. 127 – 0.1 miles north of I-70
Trenton	Grundy	230 East Hwy 6, Trenton, MO 64683	Rt. 6 – 2 miles east of Rt. 65
Unionville	Putnam	2653 Main St., Unionville, MO 63565	Rt. 136 – 0.2 miles west of Rt. 5 E.
D2 Sign Shop	Macon	26826 US Hwy 63, Macon, MO 63552	Rt. 63 – 0.3 miles south of Rt. DD
District HQ	Macon	902 N. Missouri St., Macon, MO 63552	Rt. 63 and Maffry St. Jct.

**When a facility places an order, suppliers are welcome to call other facilities in the area to determine if they have any product needs, to make the delivery trip more feasible. However, the 7-day delivery requirement still applies.**

Facility	Contact Person	Building Phone	Cellular Phone
Atlanta	Scott Miller	660-239-4411	660-651-7392
Bosworth	Todd Rounkles	660-534-7714	660-646-9500
Brookfield	Mike Gardner	660-258-7297	660-384-1644
Carrollton	Doug White	660-542-0731	660-646-9091
Chillicothe	Roger Anderson	660-646-2727	660-646-4954
Fayette	Kevin Mullins	660-248-3213	660-537-2152
Green City	Paul Green	660-874-4414	660-626-3405
Harris	Larry Holmes	660-794-2455	660-748-5788
Jct. C & V	Dean Palmer	660-244-3935	660-384-1647
Keytesville	Jeff Peters	660-288-3345	660-651-0429
Kirksville	Randy Brown	660-785-2471	660-341-0574
Lancaster	Todd Greenstreet	660-457-3242	660-341-5472
Macon	Keith Porter	660-385-3721	660-651-3886
Marshall	Bucky Failor	660-886-3464	660-815-1417
Marshall Jct.	Milton Wright	660-879-4417	660-815-1465
Milan	Rodney Welch	660-265-3823	660-265-8052
Moberly	T.K. Brenner	660-263-6482	660-651-6482
New Cambria	Debbie Przybylski	660-226-5250	660-651-7395
Princeton	Jack Clapham	660-748-3366	660-748-5740
Sweet Springs	Steve Giffen	660-335-6812	660-815-1428
Trenton	Frank Allen	660-359-5100	660-359-1421
Unionville	Roger Roof	660-947-2665	660-626-7402
D2 Sign Shop	Robbie Teter	660-385-6263	660-651-4697
District HQ	Darin Biegel	660-385-8241	660-346-0637

# PREFERENCE IN PURCHASING PRODUCTS

DATE: \_\_\_\_\_

The bidders attention is directed to Section 34.076 RsMO 1986 which gives preference to Missouri corporations, firms, and individuals when letting contracts or purchasing products.

Bids/Quotations received will be evaluated on the basis of this legislation.

All vendors submitting a bid/quotation must furnish ALL information requested below.

## FOR CORPORATIONS:

State in which incorporated: \_\_\_\_\_

## FOR OTHERS:

State of domicile: \_\_\_\_\_

## FOR ALL VENDORS:

List address of Missouri offices or places of business:

---

---

---

---

---

---

---

---

## THIS SECTION MUST BE COMPLETED AND SIGNED:

FIRM NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

BY (signature required): \_\_\_\_\_

Federal Tax I.D. #: \_\_\_\_\_ if no Federal Tax I.D. # - list Social Security #: \_\_\_\_\_

NOTE: For bid/quotation to be considered, the "Preference in Purchasing Products" form must be on file in the General Services (Procurement) Division and must be dated in the current calendar year.

## VENDOR NOTES

**Missouri Department of Transportation purchase orders must be issued to the invoicing company/address. If the invoicing company/address will be different from that listed in the vendor information section (below), the vendor should specify the “remit to” company/address in the vendor notes section (above).**

## VENDOR INFORMATION

Vendor Name/Mailing Address:	Vendor Contact Information (including area codes):
	Phone #:
	Cellular #:
Email Address:	Fax #:
Printed Name and Title of Responsible Officer or Employee:	Signature:
Is your company registered/certified with the State of Missouri as a (please circle):	
MINORITY BUSINESS ENTERPRISE (MBE) ?                      YES                      NO	
WOMEN BUSINESS ENTERPRISE (WBE) ?                      YES                      NO	
Would your company like information on becoming a registered/certified MBE/WBE vendor?                      YES                      NO	

**All responses to this Request For Quotation should be submitted on this form and pages 1, 5 and 6, as a minimum, should be returned to the Buyer listed above at the District mailing address or fax number shown.**

**Note: If any of the “Standard Solicitation Provisions” and “General Terms and Conditions” on the following pages conflict with the requirements outlined in this Request For Quotation, the RFQ requirements will supersede those below.**

## STANDARD SOLICITATION PROVISIONS

- a. The Missouri Department of Transportation (MoDOT) reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid/quote/proposal, unit prices will govern.
- b. All bids/quotes/proposals must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
- c. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown, within the State of Missouri.
- d. Time of delivery is a part of the consideration and, if not otherwise stated in the solicitation documents, must be stated in definite terms by the Bidder/Offeree and must be adhered to. If time varies on different items, the Bidder/Offeree shall so state.
- e. If providing bids/quotes/proposals for commodities, the Bidder/Offeree will state brand or make on each item. If bidding or proposing other than the make, model or brand specified, the manufacturer's name, model number or catalog number must be given.
- f. **For bids/proposals of \$25,000 or more**, no bids/proposals by telephone, telegram or telefax will be accepted. If provided, these bids/proposals should be returned in the MoDOT solicitation return envelope.
- g. If a solicitation return envelope is provided by MoDOT, the bid/quote/proposal should be returned in the envelope provided with the Bid/RFQ/RFP Request Number plainly indicated thereon.
- h. The date specified for the returning of bids/quotes/proposals is a firm deadline and all bids/quotes/proposals must be received at the designated office by that time. The Department does not recognize the U.S. Mail, Railway Express Agency, Air Express, or any other organization, as its agent for purposes of accepting proposals. All proposals arriving at the designated office after the deadline specified will be rejected.

## GENERAL TERMS AND CONDITIONS

### General Performance

- a. This work is to be performed under the general supervision and direction of the Missouri Department of Transportation (MoDOT) and, if awarded any portion of the work, the Contractor agrees to furnish at his own expense all labor and equipment required to complete the work, it being expressly understood that this solicitation is for completed work based upon the price(s) specified and is not a solicitation for rental of equipment or employment of labor by MoDOT, and MoDOT is to have no direction or control over the employees used by the Contractor in performance of the work.

### Deliveries

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.
- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- c. Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

### Nondiscrimination

- a. The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. All solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of the Contractor's obligations under this contract and the Regulations, will be relative to nondiscrimination on the grounds of race, color, or national origin.
  - 1) Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MoDOT shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
    - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
    - ii. cancellation, termination or suspension of the contract, in whole or in part.

### Contract/Purchase Order

- a. By submitting a bid/quote/proposal, the Bidder/Offeree agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's proposal and/or submitted pricing, and (3) the MHTC's acceptance of the proposal and/or bid by purchase order.

- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized purchase order and/or notice to proceed.
- d. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

#### **Subcontracting**

- a. It is specifically understood that no portion of the material or any interest in the contract, shall be subcontracted, transferred, assigned or otherwise disposed of, except with the written consent of MoDOT. Request for permission to subcontract or otherwise dispose of any part of the work shall be in writing to MoDOT and accompanied by a showing that the organization which will perform the work is particularly experienced and equipped for such work.
- b. Consent to subcontract or otherwise dispose of any portion of the work shall not be construed to relieve the Contractor of any responsibility for the production and delivery of the contracted work and the completion of the work within the specified time.
- c. All payments for work performed by a subcontractor shall be made to the Contractor to whom the contract was awarded and the purchase order issued.

#### **Invoicing and Payment**

- a. MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Federal Excise Tax Exemption Certificate will be furnished to the successful Bidder/Offeror upon request.
- b. Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- c. Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- d. The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Contractor's expense.
- e. The MHTC reserves the right to purchase goods and services using the state purchasing card.

#### **Applicable Laws and Regulations**

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MoDOT a copy their current Authority Certificate from the Secretary of State of the State of Missouri.
  - 1) Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MoDOT a copy of their current Transient Employer Certificate from the Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
- c. The contractor shall only utilize personnel authorized to work in the United States in accordance with applicable federal and state laws and Executive Order 07-13 for work performed in the United States.
- d. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.

#### **Preferences**

- a. In the evaluation of bids/quotes/proposals, preferences shall be applied in accordance with Chapter 34 RsMO. Contractors should apply the same preferences in selecting subcontractors.
- b. By virtue of statutory authority, RsMO. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
  - 1) If attached, the document entitled "**PREFERENCE IN PURCHASING PRODUCTS**" must be completed and returned with the solicitation documents.
  - 2) If attached, the document entitled "**MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT**" must be completed and returned with the solicitation documents. **Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more**
- c. In the event of a tie of low bids, the MHTC reserves the right to establish the method to be used in determining the award



### **Remedies and Rights**

- a. No provision in the contract shall be construed, expressly or implied a waiver by the MHTC of any existing or future right and/or remedy available by law in the event of any claim by the MHTC of the Contractor's default or breach of contract.
- b. The Contractor agrees and understands that the contract shall constitute an assignment by the Contractor to the MHTC of all rights, title and interest in and to all causes of action that the Contractor may have under the antitrust laws of the United States or State of Missouri for which causes of action have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or produced by the Contractor in the fulfillment of the contract with the MHTC.
- c. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request MoDOT to enter into such litigation to protect the interests of the MHTC, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

### **Cancellation of Contract**

- a. The MHTC may cancel the contract at any time for a material breach of contractual obligations or for convenience by providing the Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.
- b. If the MHTC cancels the contract for breach, the MHTC reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as the MHTC deems appropriate and charge the Contractor for any additional costs incurred thereby.

### **Bankruptcy or Insolvency**

- a. Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assigned the benefit or creditors, the Contractor must notify MoDOT immediately. Upon learning of any such actions, the MHTC reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the Contractor responsible for damages.

### **Inventions, Patents, and Copyrights**

- a. The Contractor shall defend, protect, and hold harmless the MHTC, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the Contractor's performance or products produced under the terms of the contract.

### **Inspection and Acceptance**

- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

### **Warranty**

- a. The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by MoDOT, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.
- b. Such warranty shall survive delivery and shall not be deemed waived either by reason of the MHTC's acceptance of or payment for said equipment, supplies, and/or services.

### **Status of Independent Contractor**

- a. The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matter.

### **Indemnification**

- a. The Offeror shall defend, indemnify and hold harmless the Commission, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Offeror's performance of its obligation under this Agreement.

THANK YOU

## DATE: \_\_\_\_\_

FROM: \_\_\_\_\_ (Company Name)  
 \_\_\_\_\_ (Mailing Address)  
 \_\_\_\_\_ (City, State, Zip Code)  
 \_\_\_\_\_ (Phone #)  
 \_\_\_\_\_ (Fax #)

( ) Product or service is not available or cannot meet the required specifications

( ) Other obligations – cannot make required deadline

( ) The delivery point or work location is outside of our territory or coverage/service area

( ) Other – Please explain below:

Company Contact Person: \_\_\_\_\_ Email Address: \_\_\_\_\_

- PAGE 10 OF 10



## LUBRICATING PRODUCTS MGS-92-12J

**1.0 DESCRIPTION.** This specification covers motor vehicle lubricating products for delivery in prepackaged containers such as drums, pails, etc., or for delivery into bulk storage tanks at department-owned facilities.

**1.1** Unless otherwise stated, the specification references and test methods are from the latest version in effect at the time of this contract.

**1.2** Bidders that are repackaging another manufacturer's product shall include that manufacturer's name in the proposal.

**1.3** Bidders furnishing Multi-Grade Lubricating Oil under the American Petroleum Institute (API) Classification System shall include the API license number in the proposal. Repackagers using a private label are required to obtain their own license.

## **2.0 MATERIALS.**

### **2.1 Multi-Grade Lubricating Oil, SAE Grade 15W-40.**

**2.1.1 General.** The oil shall meet and be licensed by the most recent API service classification, as available from most suppliers, and shall be intended for crankcase lubrication of gasoline and diesel engines. It shall be manufactured from the same base stocks and with the same types and amounts of additives as were used to secure API qualification.

**2.1.1.1** The engine lubricating oils shall be derived from petroleum fractions, synthetically prepared compounds or a combination of the two types of products. The stocks shall be compounded with such functional additives (detergents, dispersants, oxidation inhibitors, corrosion inhibitors, etc.) as are necessary to meet the specified requirements. No carcinogenic or potentially carcinogenic constituents, as defined under the Hazard Communication Standard (29 CFR 1910.1200) shall be present.

**2.1.2 Documentation.** The following information shall be furnished with the bid.

**2.1.2.1** The bidder shall furnish documentation showing the API license number, brand name and manufacturer under which the oil was qualified and that the oil meets the most recent API service classification as available from most suppliers.

**2.1.2.2** The documentation shall include typical test results for the following physical and chemical properties when tested in accordance with the applicable ASTM test method.

	<u>Test Method</u>
Viscosity, 40 & 100 °C, centistokes	ASTM D 445
Viscosity Index	ASTM D 2270
Pour Point	ASTM D 97
Flash Point	ASTM D 92
Gravity, API	ASTM D 287
Foaming	ASTM D 892

**2.1.3 Basis of Payment.** Payment for oil received shall be based on the volume at 15.6 °C and quantities packaged at higher temperatures will be corrected to that volume.

## **2.2 Universal Hydraulic/Transmission Fluid.**

**2.2.1 General.** Universal Hydraulic/Transmission Fluid shall be for use in tractors and equipment where one fluid is desirable and can be used in combination hydraulic-transmission-wet brake systems of equipment used in off-highway service.

**2.2.1.1** Universal Hydraulic/Transmission Fluid shall have Allison C-4 approval.

**2.2.1.2** The fluid shall contain such functional additives as oxidation inhibitors, rust inhibitors, pour point depressants, anti-wear additives, foam suppressers, water tolerance additives, etc. as are necessary to meet the following requirements when tested in accordance with the applicable ASTM tests shown in this specification. Paraffinic base stock shall be used in the manufacture of universal hydraulic transmission oil.

	<u>Requirement</u>	<u>Test Method</u>
API Gravity at 15.6 °C	27 - 32	ASTM D 287
Viscosity, 100 °C, centistokes	7.0 - 11.0	ASTM D 445
Viscosity Index, min.	125	ASTM D 2270
Flash Point, °C, COC, min.	177	ASTM D 92
Pour Point, °C, max.	-40	ASTM D 97
Corrosion, Copper strip, 3 hrs. @ 100 °C	Negative	

**2.2.2 Documentation.** The following information shall be furnished with the bid.

**2.2.2.1** The bidder shall furnish documentation showing that the brand of fluid that is being furnished has been approved and is listed by the Allison Transmission Division, General Motors Corporation, as Allison C-4, Intermediate Viscosity Fluids for off-highway transmissions.

**2.2.2.2** If the fluid is not shown in the latest list then a copy of the letter granting approval shall be submitted.

**2.2.2.3** The documentation shall include the brand name, manufacturer and a typical analysis of the properties shown in 2.2.1.2.

**2.2.3 Basis of Payment.** Payment for fluid received shall be based on the volume at 15.6 °C and quantities packaged at higher temperatures will be corrected to that volume.

## **2.3 Gear Oil - SAE Grade 80W-90.**

**2.3.1 General.** Multi-Purpose Gear Oil shall be one grade of Gear Lubricant intended for the lubrication of automotive gear units and all heavy-duty industrial-type enclosed gear units, when the sustained operating temperatures of the lubricant are below 121 °C.

**2.3.1.1** The gear lubricant shall be a homogeneous liquid free from sediment and suspended matter at any temperature in the operating range up to 121 °C for mineral oils and 170 °C for synthetic oils.

**2.3.1.2** The gear lubricant shall be a brand that has been tested and is in complete accordance with the requirements of API GL5. The lubricant shall also be in accordance with the following requirements when tested in accordance with the applicable ASTM specifications shown in this specification.

<u>Property</u>	<u>Requirement</u>	<u>Test Method</u>
Viscosity Index, min.	85	ASTM D 2270
Pour Point, °C, max.	-15	ASTM D 97
Corrosion, Copper Strip, 3 hrs. @ 121.1 °C	3a max	ASTM D 130
Color	The base oil used in the gear lubricant shall be a filtered stock not darker than No. 8 NPA.	

**2.3.2 Documentation.** The following information shall be furnished with the bid.

**2.3.2.1** The bidder shall furnish documentation showing that the gear oil furnished is in accordance with all requirements of API GL 5.

**2.3.2.3** The documentation shall include the brand name, manufacturer and a typical analysis of the properties shown in 2.3.1.2.

#### **2.4 Synthetic Gear Oil 75W-90.**

**2.4.1 General.** Synthetic Gear Oil shall be one grade of Gear Lubricant formulated with synthetic based oils intended for the lubrication of automotive gear units and all heavy-duty industrial-type enclosed gear units, when the sustained operating temperatures of the lubricant are below 170 °C.

**2.4.1.1** The gear lubricant shall be a homogeneous liquid free from sediment and suspended matter at any temperature in the operating range up 170 °C .

**2.4.1.2** The gear lubricant shall be a brand that has been tested and that is in complete accordance with the requirements of API GL5. The lubricant shall also comply with the following requirements when tested in accordance with the applicable ASTM test methods.

	<u>Requirement</u>	<u>Test Method</u>
Viscosity Index, min.	140	ASTM D 2270
Viscosity, 100 °C, centistokes,	15.5 - 19.5	ASTM D 445
Pour Point, °C, max,	-40	ASTM D 97

**2.4.2 Documentation.** The following information shall be furnished with the bid.

**2.4.2.1** The bidder shall furnish documentation showing that the gear oil furnished will comply with all requirements of the API GL5.

**2.4.2.3** The documentation shall include the brand name, manufacturer, identification that the material is a synthetic formulation and a typical analysis of the properties shown in 2.4.1.2.

#### **2.5 Multi-Purpose Lithium Complex Grease, NLGI Grade 2 or Multi-Purpose Lithium Complex Grease, NLGI Grade 2 with 3.0% Molybdenum Disulfide.**

**2.5.1 General.** The Multi-Purpose Lithium Complex Grease and Multi-Purpose Lithium Complex Grease with 3.0% molybdenum disulfide shall be suitable for the lubrication of automotive chassis and wheel bearings and shall be in accordance with the requirements of ASTM D 4950, Standard Classification and Specification for Automotive Service Greases for NLGI service classification GC-LB, Grade 2. The bid request shall state the type of grease to be supplied.

**2.5.1.1** The grease shall consist of a smooth homogeneous mixture of a lithium complex soap

and a well-refined mineral oil. The grease shall be free from fillers such as rosin, rosin oils, talc, wax, powdered mica, sulfur, clay, asbestos, or other undesirable or deleterious impurities. If the grease to be supplied contains molybdenum disulfide, it shall be a homogeneous mixture of lithium complex NLGI GC-LB Grade 2 and technical fine molybdenum disulfide.

**2.5.1.2** The grease shall show no separation or bleeding in use or during short-term storage and shall comply with the following requirements when tested in accordance with the applicable ASTM test methods.

	<u>Requirement</u>
Odor	The grease shall possess only a slight odor of mineral oil, and may be rejected if it has any other distinct odor.
NLGI Service Classification	GC-LB
NLGI Grade Number	2
Soap Type	Lithium Complex

When requested:

Molybdenum Disulfide, % by weight	3.0 minimum
-----------------------------------	-------------

**2.5.2 Documentation.** The following information shall be furnished with the bid.

**2.5.2.1** The bidder shall furnish documentation showing that the grease furnished is in accordance with the requirements of these specifications and that it holds a current NLGI Certification Mark License for the grease to be supplied.

**2.5.2.2** The documentation shall include the brand name, manufacturer and a typical analysis of the properties required in ASTM D 4950.

## **2.6 Heavy-Duty Aluminum Complex Grease with Molybdenum Disulfide, NLGI Grade 2.**

**2.6.1 General.** Heavy-Duty Aluminum Complex Grease with Molybdenum Disulfide shall be in accordance with ASTM D 4950, Standard Classification and Specification for Automotive Service Greases for NLGI service classification GC-LB, Grade 2.

**2.6.1.1** The grease shall consist of a smooth homogeneous mixture of an aluminum complex NLGI GC-LB Grade 2, technical fine Molybdenum Disulfide and other solid lubricants. The grease shall be free from fillers such as rosin, rosin oils, talc, wax, powdered mica, sulfur, clay, asbestos, or other undesirable or deleterious impurities.

**2.6.1.2** The grease shall show no separation or bleeding in use or during short-term storage and shall comply with the following requirements when tested in accordance with the applicable ASTM test methods.

**2.6.2 Documentation.** The following information shall be furnished with the bid.

**2.6.2.1** The bidder shall furnish documentation showing that the grease furnished is in accordance with the requirements of these specifications and that it holds a current NLGI Certification Mark License for the grease to be supplied.

**2.6.2.2** The documentation shall include the brand name, manufacturer and a typical analysis of the properties required in ASTM D 4950.

## **2.7 Dexron III/Mercon Transmission Fluid.**

**2.7.1 General.** Dexron III/Mercon Transmission Fluid shall be for use in on-highway transmissions.

**2.7.1.1** Dexron III/Mercon shall be a formulation which has been licensed by General Motors Corporation and Ford Motor Company.

**2.7.1.2** Dexron III/Mercon shall be further identified on the containers as being in accordance with Dexron III/Mercon requirements.

**2.7.2 Documentation.** The following information shall be furnished with the bid.

**2.7.2.1** The bidder shall furnish documentation showing that the brand of Dexron III/Mercon has been approved by the General Motors Corporation and Ford Motor Company.

**2.7.2.2** The documentation shall include the General Motors and Ford License Numbers and typical test results of the following physical and chemical properties when tested in accordance with the applicable ASTM test methods.

	<u>Test Method</u>
API Gravity @ 15.6 °C	ASTM D 287
Viscosity, 100 °C, centistokes	ASTM D 445
Viscosity Index, min.	ASTM D 2270
Flash Point, °C, COC, min.	ASTM D 92

**2.7.3 Basis of Payment.** Payment for oil received shall be based on the volume at 15.6 °C and quantities packaged or bulk delivered at higher temperatures will be corrected to that volume.

## **3.0 ASTM TEST METHODS.**

ASTM D 92	Test Method for Flash and Fire Points by Cleveland Open Cup
ASTM D 97	Test Methods for Pour Point of Petroleum Oils
ASTM D 128	Test Methods for Analysis of Lubricating Grease
ASTM D 130	Test Method for Detection of Copper Corrosion from Petroleum Products by the Copper Strip Tarnish Test
ASTM D 217	Test Methods for Cone Penetration of Lubricating Grease
ASTM D 287	Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)
ASTM D 445	Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)
ASTM D 566	Test Method for Dropping Point of Lubricating Grease
ASTM D 874	Test Method for Sulfated Ash from Lubricating Oils and Additives
ASTM D 892	Test Method for Foaming Characteristics of Lubricating Oils
ASTM D 1264	Test Method for Water Washout Characteristics of Lubricating greases
ASTM D 2270	Method for Calculating Viscosity Index from Kinematic Viscosity at 40 and 100 °C

**4.0 PACKAGING.** If products are to be delivered prepackaged in drums or other containers, each container shall have sufficient marking to identify the product contained therein.

**5.0 BULK DELIVERY.** Shipments of lubricating products that are to be delivered to the point of use in bulk quantities shall be accompanied by a certification statement identifying the name of the material and the specific bid request, and certifying that the material is in

accordance with the specifications for that request. The certification is to be signed by an authorized representative of the supplier. This certification statement, as well as the bill of lading, shall be provided to the department's representative at the point of delivery.

**5.2** It shall be the supplier's responsibility to ensure the delivery of the correct product into the matching bulk storage tank, as identified by labeling. The supplier shall maintain sufficient safeguards to ensure that cross-contamination does not occur when lubricants are delivered to department bulk storage tanks from bulk delivery systems. If defective, contaminated or the wrong materials are delivered into the department's storage tanks, it shall be the supplier's responsibility to replace all contaminated products with products meeting the specification, including both the new delivery and the existing material amounts.

**6.0 SAMPLING AND TESTING.** Random samples of the delivered products may be taken by the Department and tested for compliance with these specifications.

**6.1** Upon request the low bidder shall supply samples of the products to the Department for testing, one quart of each oil and two pounds of grease.



[HOME](#)


[EXTRANET](#)
[SALES & SERVICE](#)


Allison Transmission &gt; Service &gt; Fluids &gt; TES 295 Approved Fluids

**Warranty Information***Frequently Asked Questions**Publications**Guild**Fluid/Filter Change Intervals**Electronic Tools**Fluids**Service Tips**Training***TES 295 Approved Fluids**

When seeking a fluid for your Allison transmission that is TES 295 approved do not fall to the claims of some companies that claim that their product is TES 295 approved. The statements infer that these products "are designed to meet", "are equivalent to", "meet or exceed", etc. When determining whether or not a fluid is TES 295 approved, look and/or ask for one of two things:

- The Allison TES 295 approval number
- The Allison Approved logo

TES 295 Approval Number	Approved Marketer	Product Brandname
AN-011001	Castrol Heavy Duty Lubricants	TranSynd
AN-031002	BP	Autran Syn 295
AN-031003	Cognis Corporation	Emgard 2805
AN-031004	International Truck & Engine Company	Fleetrite Synthetic ATF
AN-051005	ExxonMobil Lubricants and Petroleum Specialties Company	Mobil Delvac Synthetic ATF
AN-071006	John Deere & Company	HD SynTran

Table C  
FLUIDS  
C 4 Appl  
Fluids  
TES 29  
Fluids  
TranSy  
TranSy  
Off High  
Oil Ana  
Engine  
Specific  
Fluids  
OEM Ir  
and Se  
Support  
Sched  
389 Flu



**To The Oil and Additives Industry:**

Allison Transmission, Inc. announces the release of TES-295, "Severe Duty, Extended Drain Interval Automatic Transmission Fluid Specification." The release of this specification to the industry will enable Allison customers to select transmission fluids which exhibit higher resistance to oxidation and viscosity change than C-4 specification fluids, while providing superior wear resistance and frictional properties for extended use in severe duty applications, such as city transit buses, refuse packers, tour coaches, and transmissions with Allison retarder options.

TES-295 represents years of development work and fleet validation testing. Fluids which qualify to the new TES-295 specification offer extended drain intervals to 50,000 miles in severe duty applications and up to 100,000 miles in general duty applications.

The attached TES-295 specification includes the new Durability Test Specification (TES-295) and the new Fleet Validation Specification (TES-304). Testing toward qualification to TES-295 shall be conducted at qualified independent testing laboratories. For this purpose, Allison Transmission, Inc. has authorized the use of the following independent testing laboratories for the purpose of qualifying transmission fluids to the new TES-295 specification:

Southwest Research Institute  
6220 Culebra Road  
San Antonio, TX 78238-0510

Intertek Automotive Research  
5404 Bandera Road  
San Antonio, TX 78238-1993

Allison Transmission, Inc. wishes to encourage testing toward this new specification to provide an adequate supply of TES-295 qualified products. Candidates for qualification towards TES-295 will be reviewed only after all testing has been completed, including, but not limited to, testing to the new TES-303 specification and prior to TES-304 validation testing. Currently, TES-303 testing is only available at the Allison Transmission, Inc. Engineering Test Department. Consult Allison Transmission, Inc. for test stand availability.

**Upon qualification of TES-295, Allison Transmission, Inc. intends to certify such qualification through use of a TES-295 specification trademark. Allison will grant permission to use the TES-295 specification trademark in connection the distribution, sale and promotion of all qualified transmission fluids, subject to execution of a license agreement. The license agreement will require the payment of a nominal licensing fee to help defray Allison's costs in administration of this new specification. Details regarding the TES-295 licensing program will be announced in the near future.**

For questions about these new specifications or tests contained in the specifications, contact Tom Johnson at (317) 242-3315 or email [THOMAS.L.JOHNSON@ALLISONTRANSMISSION.COM](mailto:THOMAS.L.JOHNSON@ALLISONTRANSMISSION.COM)

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Johnson", written over a horizontal line.

**Thomas L. (Tom) Johnson**  
Transmission Fluids Engineer  
Product Engineering Department

## TRANSMISSION ENGINEERING SPECIFICATION



**Allison Transmission**  
Division of General Motors Corporation



TES - 295

SEVERE DUTY, EXTENDED DRAIN INTERVAL,  
AUTOMATIC TRANSMISSION FLUID SPECIFICATION

T. L. Johnson  
Product Engineering

J. F. Hartz  
Product Engineering

4-27-99	--	Release	OS93010	TJ	LSJ
DATE	CHG LTR	REVISION RECORD	AUTHORITY	ORIG INITIAL	APPR DIST.

TES-295

4-27-99

**1.0 PURPOSE:** The purpose of this document is to describe the test methods and test requirements used in the validation of a Severe Duty, Extended Drain Interval automatic transmission fluid for use in Allison Transmission Division products.

- 1.1 Severe Duty is defined as operation in vehicles equipped with Allison retarder systems or operation in vehicles used in transit, refuse, on-off highway, and/or tour coach service vocations as defined by the Allison Transmission Division of General Motors Corporation.
- 1.2 Extended Drain Interval is defined as a drain (oil change) interval greater than the drain intervals established for C4 and/or DEXRON-III products as published by Allison Transmission Division/GM.
- 1.3 References to "an automatic transmission fluid" shall mean the approved source product or the product being tested for source approval (see Section 3.0).
- 1.4 References to "Allison" shall mean the Allison Transmission Division of General Motors Corporation.

## 2.0 GENERAL REQUIREMENTS

- 2.1 This specification defines the minimum performance requirements of an automatic transmission fluid using standard tests defined by ASTM<sup>1</sup> combined with transmission level performance/durability tests and fleet validation tests.
- 2.2 Allison Transmission Product Engineering shall have sole responsibility for the review and approval of an automatic transmission fluid tested under this specification prior to the addition of that automatic transmission fluid to the approved source list as shown in Section 3.0 of this specification.
- 2.3 An automatic transmission fluid approved under this specification shall meet all test requirements as defined within this specification.
- 2.4 Tests shall be conducted by an independent test laboratory approved for use by Allison Transmission Product Engineering except where those tests are only available through the Allison Product Engineering Test Department.
- 2.5 The following independent test laboratories are authorized to run automatic transmission fluid qualification tests against this specification.

Southwest Research Institute  
6220 Culebra Road  
San Antonio, TX 78228-0510

EG&G Automotive Research, Inc.  
5404 Bandera Road  
San Antonio, TX 78238-1993

- 2.6 All data generated in testing against this specification shall be considered a permanent part of the data package. No data shall be left out of the data package regardless of whether the test result passed or failed the requirement.

<sup>1</sup> American Society for Testing and Materials

TES-295

4-27-99

- 2.7 Allison Transmission Product Engineering reserves the right to revise this specification, as deemed necessary, to ensure satisfactory performance of an automatic transmission fluid in all Allison products.

### 3.0 APPROVED SOURCE

- 3.1 Engineering source approval required. Must conform to TES-84.

- 3.2 The following fluid is approved per this TES:

**Fluid Code: BXL-254A**

Castrol Industrial North America, Inc.  
Specialty Products Division  
1100 West 31<sup>st</sup> Street  
Downers Grove, IL 60515

- 3.3 The original source approved fluid (Section 3.2), Fluid Code BXL-254A, shall be used as a "Reference Fluid" for any fluids tested in accordance with this specification.
- 3.4 "Reference Fluid" is defined as the fluid which shall be used to set acceptance limits for the performance tests cited in this specification under Section 4.0.
- 3.5 Not less than (10) 55 gallon drums of the reference fluid shall be kept at one of the independent test laboratories (Section 2.5) for test calibration purposes. Such calibrations shall occur as deemed necessary by the testing facility.
- 3.6 The reference fluid shall be stored in an enclosed structure designed for and typically used for oil storage purposes.

### 4.0 SUMMARY OF TESTS

- 4.1 The following is a list of tests which are applicable to this specification.

1. ELEMENTAL ANALYSIS
2. INFRARED SPECTRUM
3. BROOKFIELD VISCOSITY
4. KINEMATIC VISCOSITY
5. FLASH POINT
6. FIRE POINT
7. FOAM TEST
8. COPPER STRIP TEST
9. CORROSION TEST
10. RUST PROTECTION TEST
11. SEAL MATERIALS COMPATIBILITY TESTS
12. OXIDATION TEST
13. GEAR SCUFFING WEAR TEST
14. SLIDING CONTACT WEAR TEST
15. FRICTIONAL PROPERTIES TESTS
16. CYCLING DURABILITY TEST
17. FLEET VALIDATION TESTS

TES-295

4-27-99

**5.0 OTHER REFERENCED SPECIFICATIONS**

5.1 This specification refers to other TES (Transmission Engineering Specifications) as follows:

TES-228  
TES-303  
TES-304

5.2 Revisions to any of the above specifications shall be made with regard to this specification. The revising authority shall ensure that changes to the above specifications are reflected back to this specification as deemed necessary.

5.3 Revisions to this specification shall be made with regard to the above specifications. The revising authority shall ensure that changes to this specification are reflected back to the other specifications (TES-228, TES-303, and TES-304) as deemed necessary.

TES-295

4-27-99

TEST	METHOD	REQUIREMENT
Metals Content (ppm)	ASTM D4951	Report: Ba, B, Ca, Mg, P, Si, Na, and Zn
Chlorine Content (ppm)	ASTM D808	Report
Nitrogen Content (ppm)	ASTM D3228	Report
Sulfur Content (ppm)	ASTM D129 or D4951	Report
Total Acid Number	ASTM D664	Report
Total Base Number	ASTM D2896 or D4739	Report
Infrared Spectrum	ASTM E168	Report (provide IR scan)
Kinematic Viscosity (cSt) (Unused "fresh" fluid)	ASTM D445	<ul style="list-style-type: none"> <li>Report KV at 40°C</li> <li>Report KV at 100°C</li> <li>7.0 min KV at 100°C</li> </ul>
Brookfield Viscosity (cP)	ASTM D2983	<ul style="list-style-type: none"> <li>Report BV at -10°C, -20°C, -30°C, and -40°C</li> <li>8700 max at -40°C</li> </ul>
Flash Point (°C)	ASTM D92	235 min
Fire Point (°C)	ASTM D92	270 min
Copper Strip Test	ASTM D130 (modified) 3 hrs. at 150°C	1B
Corrosion Test	ASTM D665 (Procedure A)	Pass
Rust Protection Test	ASTM D1748 Sandblasted surface, 40°C, 50 hrs.	No rust or corrosion on any test surface
Seals Compatibility Tests	GM6297M (Appendix B)	Pass
Foam Test	GM6297M (Appendix A)	No foam at 95°C or 135°C
Gear Scuffing Wear Test	ASTM D5182	<ul style="list-style-type: none"> <li>Failure Load Stage &gt; 12</li> <li>EOT Gear Weight Loss &lt; 0.12 g</li> </ul>
Oxidation Test	GM6297M (Appendix E - modified) 600 hrs.	<ul style="list-style-type: none"> <li>EOT 40°C KV Change = 12% max.</li> <li>EOT 100°C KV Change = 9% max.</li> <li>EOT -20°C Brookfield Viscosity = 1260 max.</li> <li>EOT TAN change = 3.25 max.</li> <li>EOT Pentane Insolubles = 0.04% max.</li> <li>EOT Metals: Fe &lt; 25 ppm, Cu &lt; 20 ppm, Pb &lt; 100 ppm</li> </ul>
Frictional Properties Test - Graphitic Materials	TES-228 (SECTION VIII)	<ul style="list-style-type: none"> <li>EOT Slip Time &lt; 0.63 seconds</li> <li>EOT Midpoint Dynamic Coefficient &gt; 0.112</li> </ul>
Frictional Properties Test - Paper Materials	TES-228 (SECTION IX - modified) 30,000 cycles	<ul style="list-style-type: none"> <li>EOT Slip Time &lt; 0.45 seconds</li> <li>EOT Midpoint Dynamic Coefficient &gt; 0.115</li> </ul>
Cycling Durability Test	TES-303	<ul style="list-style-type: none"> <li>EOT Metals: Fe &lt; 60ppm, Cu &lt; 10 ppm, Pb &lt; 30 ppm</li> <li>EOT Viscosity at 100°C &gt; 7.4 cSt min</li> <li>Viscosity change = 5% max over 550 hour test duration</li> <li>EOT TAN (Total Acid Number) &lt; 0.8</li> <li>No sludge or varnish on parts</li> <li>No reaction plate wear</li> <li>No bushing corrosion or lead depletion</li> <li>No shift anomalies or excessive adaptive calibration change</li> </ul>
Fleet Validation Tests	TES-304	<ul style="list-style-type: none"> <li>Performance equal to or better than the reference fluid.</li> </ul>

ppm - parts per million  
KV - Kinematic Viscosity

cP - centi-Poise  
BV - Brookfield Viscosity

cSt - centi-Stokes